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10/551,279	09/27/2005	Ken Tatebe	029650-173	1584
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EXAMINER				
KWAK, DEAN P				
ART UNIT		PAPER NUMBER		
4153				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

**Application No.**

10/551,279

**Applicant(s)**

TATEBE ET AL.

**Examiner**

Dean Kwak

**Art Unit**

4153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)
- Paper No(s)/Mail Date 09/27/2005, 06/29/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**boundary (Claims 1 & 6)**” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

***Claim Objections***

4. Claim 7 is objected to because of the following informalities: "the average size" recited in Claim 7 renders the claims unclear. Suggested correction is to replace "the average size" with "the average pore size". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-7 & 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tatebe et al. (Japanese Patent Application No. Hei 11-352306, JP 2001-165930; see English translated version).

Regarding Claims 1 & 6, Tatebe et al. disclose a test paper (e.g., test strip, Abstract & P10/[0008]/L4) comprising a porous membrane (Abstract & P10/[0008]/L13 & 17) having a function of separating an object that should be filtered out from a sample

by filtration and carrying thereon a reagent (P3/Claim 1) capable of giving a color by reaction with a specified component in the sample (P5/Claim 8 & P16/[0018]/L1),

- wherein said porous membrane has a first layer having a surface to which a sample is supplied (Abstract & P10/[0008]/L12-15) and a second layer having a surface at which the sample is percolated and measured (Abstract & P10/[0008]/L16-P11/[0008]/L1),
- said first layer being made of large-sized pore portions (P10/[0008]/L13-15), with a surface of said first layer being a smooth surface having apertures thereat (e.g., porous, P10/[0008]/L13), said second layer being made of small-sized pore portions (P10/[0008]/L17-18), with a surface of said second layer having apertures thereat (e.g., porous, P10/[0008]/L17),
- a boundary between said first layer and said second layer (e.g., stacked, P10/[0008]/L5-6) being located from the surface of said first layer within a range of 1/5 to 1/2 of a thickness of the porous membrane (see P11/[0009]), and
- wherein said porous membrane has a thickness of 50 to 200  $\mu\text{m}$  (P3/Claim 2, P4/Claim 3, P11/[0009]/L4 & 12) and a porosity of 60 to 95% (P3/Claim 2, P4/Claim 3, P11/[0009]/L5 & 13), said first layer has an average pore size of 0.5 to 10  $\mu\text{m}$  (P3/Claim 2 & P11/[0009]/L3, 3 to 10  $\mu\text{m}$ ) in the surface thereof, and said second layer has an average pore size of 0.1 to 3.0  $\mu\text{m}$  (P4/Claim 3 & P11/[0009]/L11-12, 0.1 to 2  $\mu\text{m}$ ) in the surface thereof.

Regarding Claims 1 & 6, boundary located within a range of 1/5 to 1/2 of a thickness of the porous membrane, it is noted that once two layers are stacked over the other, the boundary will inherently be located within the range. See MPEP § 2112.

Regarding Claims 3 & 9, Tatebe et al. disclose all of the claim limitations as set forth above. In addition, Tatebe et al. disclose the test paper wherein the surface of said second layer has irregularities (e.g., porous, P11/[0009]/L10).

Regarding limitations recited in Claims 3 & 9, which are directed to a manner of operating disclosed apparatus (e.g. "to provide a gloss and luster-free surface"), it is noted that neither the manner of operating a disclosed device nor material or article worked upon further limit an apparatus claim. Said limitations do not differentiate apparatus claims from prior art. See MPEP § 2114 and 2115. Further, it has been held that process limitations do not have patentable weight in an apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim."

Regarding Claims 4, 5 & 7, Tatebe et al. disclose all of the claim limitations as set forth above. In addition, Tatebe et al. disclose the test paper wherein:

- a material for said porous membrane is made of polyether sulfone (P11/[0010]/L4),
- said sample is a blood and said object that should be filtered out contains blood cells (P12/[0010]/L1-3), and
- a ratio between the average sizes in the surface of said first layer and the average size in the surface of said second layer is in the range of 1 to 6 (P11/[0009]/L5-17).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.



2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 2 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatebe et al. (Japanese Patent Application No. Hei 11-352306, JP 2001-165930; see English translated version) as applied to claims 1 & 6 above.

Regarding Claims 2 & 8, Tatebe et al. disclose all of the claim limitations as set forth above. While Tatebe et al. do not explicitly disclose the second layer surface having glossiness of not higher than 11, the change in the surface glossiness is not considered to confer patentability to the claims. Tatebe et al. utilize optical measurement (e.g., spectrophotometer, P25/[0038]/L5) and light reflection absorbance at the surface of the membrane (P25/[0038]/L7-P26/[0038]/L1) are measured, where

the results are determined by change in refraction. Therefore the surface glossiness or the surface reflectivity is a variable that can be modified, among others, by varying the surface of the material used. For that reason, the surface, and membrane material, would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the surface glossiness cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the membrane in the apparatus of Tatebe et al. to obtain the desired surface glossiness (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean Kwak whose telephone number is 571-270-7072. The examiner can normally be reached on M-TH, 7:30 am - 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on 571-272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tony G Soohoo/  
Primary Examiner, Art Unit 1797  
AU 4153 TA

21Nov08

/D. K./  
Examiner, Art Unit 4153